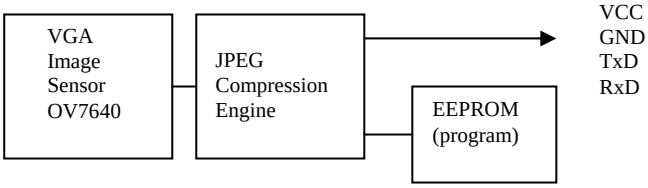
COMedia Ltd.
康大科技有限公司

C328
JPEG Camera Module
W/ UART Interface

General Description

The C328 is VGA camera module performs as a JPEG compressed still camera and can be attached to a wireless or PDA host. Users can send out a snapshot command from the host in order to capture a full resolution single-frame still picture. The picture is then compressed by the JPEG engine and transferred to the host thru serial port.

Block Diagram



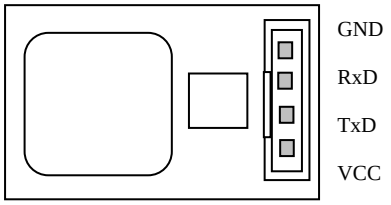
Features

- Small in size, 20x28mm
- VGA resolution, down sample to QVGA or CIF
- 3.3V operation
- Low power consumption 60mA
- User friendly commands to control the module
- UART interface of up to 115.2Kbps
- Auto detect baud rate and make connection to the host
- Power saving mode
- Various lens options

Pin Description

Pin	Description
VCC	Power 3.3VDC
TxD	Data Transmit (3.3V)
RxD	Data Receive (3.3V)
GND	Power Ground

Connector specification: 2mm pitch, 4pin single row
Reference part no: Suyin 190600
Mating connector: Suyin 140600



Bottom View

Command Summary

Detail Command control, please refer to the user's manual

1.	Initial	To configure the image size, color type
2.	Get Picture	Get Picture type
3.	Snapshot	Set snap shot image type
4.	Set Package Size	Set the package size to transmit data from module to Host
5.	Set Baudrate	Change the baud rate
6.	Reset	Reset the whole system or reset the state machine
7.	Power Off	To enter sleep mode
8.	Data	Set the data type and length for transmitting data to host
9.	SYNC	Sync signal to connect between host and module
10.	ACK	Command to indicate the communication success
11.	NAK	Command to indicate the communication fail with error code

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Electrical Specification

V_{DD} = 3.3V+10%, TA = 0 to 25°C

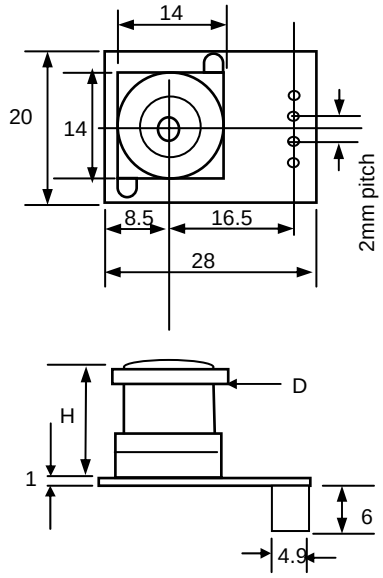
Symbol	Parameter	Condition	Min	Typ	Max	Unit
V_{DD}	DC supply voltage		3.0	3.3	3.6	V
Io	Normal Operation Current	Operating		60		mA
Is	Suspend Current	Suspend		100		uA
V_{IH}	High level input voltage	TTL	2.0			V
V_{IL}	Low level input voltage	TTL			0.8	V

Lens Specification

Description	C328	C328-2225	C328-3620IR	C328-3620	C328-6016	C328-6016IR
F/#	2.8	2.5	2.0	2.0	1.6	1.6
Focal length (mm)	4.63	2.2	3.6	3.6	6.0	6.0
Field of View Diagonal (deg)	41	109	50	50	43	43
Filter Option IR-cut filter	Yes	NA	Yes	NA	NA	Yes
Total height from PCB H (mm)	10	18	22	22	20	20
Diameter of lens cap D (mm)	9	15	14	14	14	14

Board Measurement

Note:
1. except C328 of small lens, all other lens holder are with 12x0.5 thread, as shown below.
2. due to the different lens format, the holder may be different, can't be interchangeable.



Note: In order to facilitate people for better understanding the communication with the module, we have developed an EV kit, C328-EV232, for user to run under PC Windows environment. However, this module is not designed for PC application. Such PC evaluation is only for better understanding of command control.

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